

ABSTRACT

The present invention provides a storage device available for increasing storage capacity, mainly comprising a controller and at least a solid-state storage medium; wherein said
5 controller has at least a interface that may be connected to an external system, a microprocessor processing system instructions, and a memory interface communicates to said solid-state storage medium (media); said controller, through an appropriate compressing/decompressing mechanism,
10 compresses original data transferred from the external system to minimized data in $1/N$ ratio and write it to said solid-state storage medium (media), in order to achieve more storage capacity in said solid-state storage medium (media).

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Fig.1